

## ABSTRACT

The present invention relates, *e.g.*, to a method of detecting a mismatch in a double stranded nucleic acid target, comprising (a) contacting the target with (i) a Mu-end nucleic acid, and (ii) a phage Mu transposase, under conditions effective for the Mu-end nucleic acid to transpose into the target at about the site of a mismatch, if the target comprises a mismatch, and (b) detecting transposition of the Mu-end DNA into the target, wherein transposition of the Mu-end nucleic acid into the target at a predominant site indicates the presence of a mismatch at that site.

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